

REMARKS

New claim 9 replaces original claim 1. Claims 2-8 remain in the application and depend either directly or indirectly from new claim 9.

The original claims 1-8 were rejected on the ground of nonstatutory obviousness type double patenting, based on claims 1-10 of SUROWIECKI 6,854,237 and OSTERLE 6,428,258. Applicant respectfully transgresses this rejection.

New claim 9 specifies "wherein at least one side wall of the upper channel member includes a screw opening and an adjacent side wall of the upper end portion of the stud includes a longitudinal slot." The claim continues by specifying "a screw having a head outwardly of said opening in said sidewall of the upper channel member contiguous the side wall of the upper channel member, an unthreaded shank portion within said opening if the side wall of the upper channel member and within the longitudinal slot in the sidewall of the upper channel portion of the stud, and a threaded portion connected to the unthreaded portion of the screw." Claim 9 continues by specifying, "wherein the threaded portion of the screw includes an end thread contiguously slot, said end thread being wider than the slot so that it will contact the stud on opposite sides of the slot and the screw will be prevented by such contact from moving axially outwardly through the slot."

Figure 4 of the application drawing (enlarged) is reproduced below:

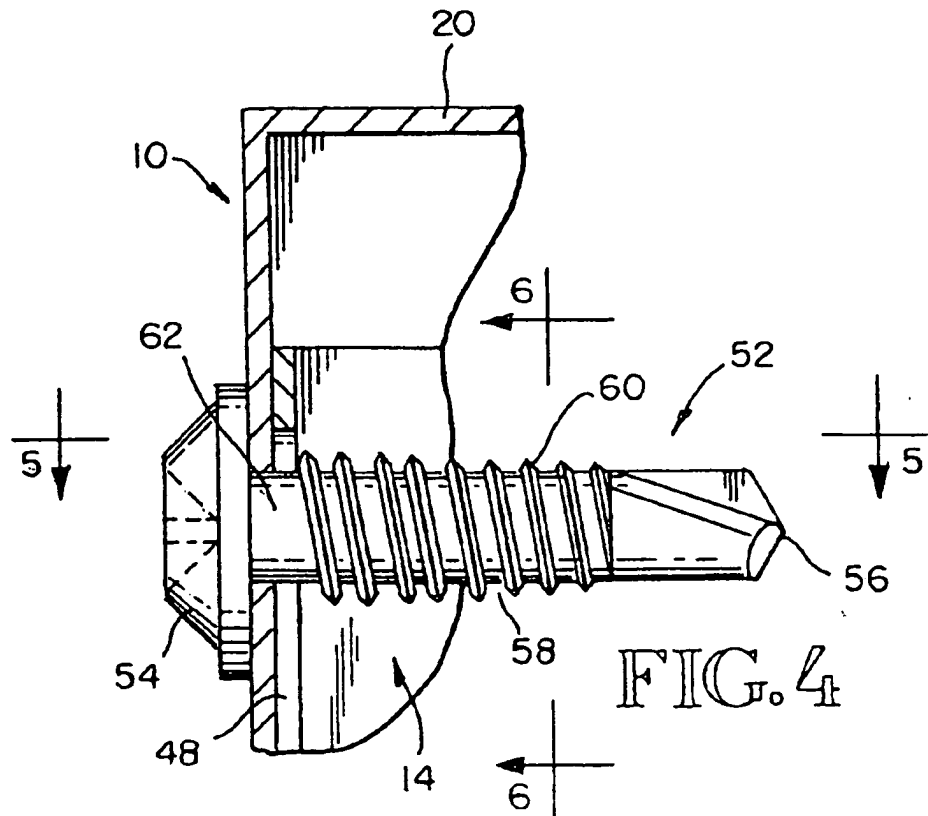
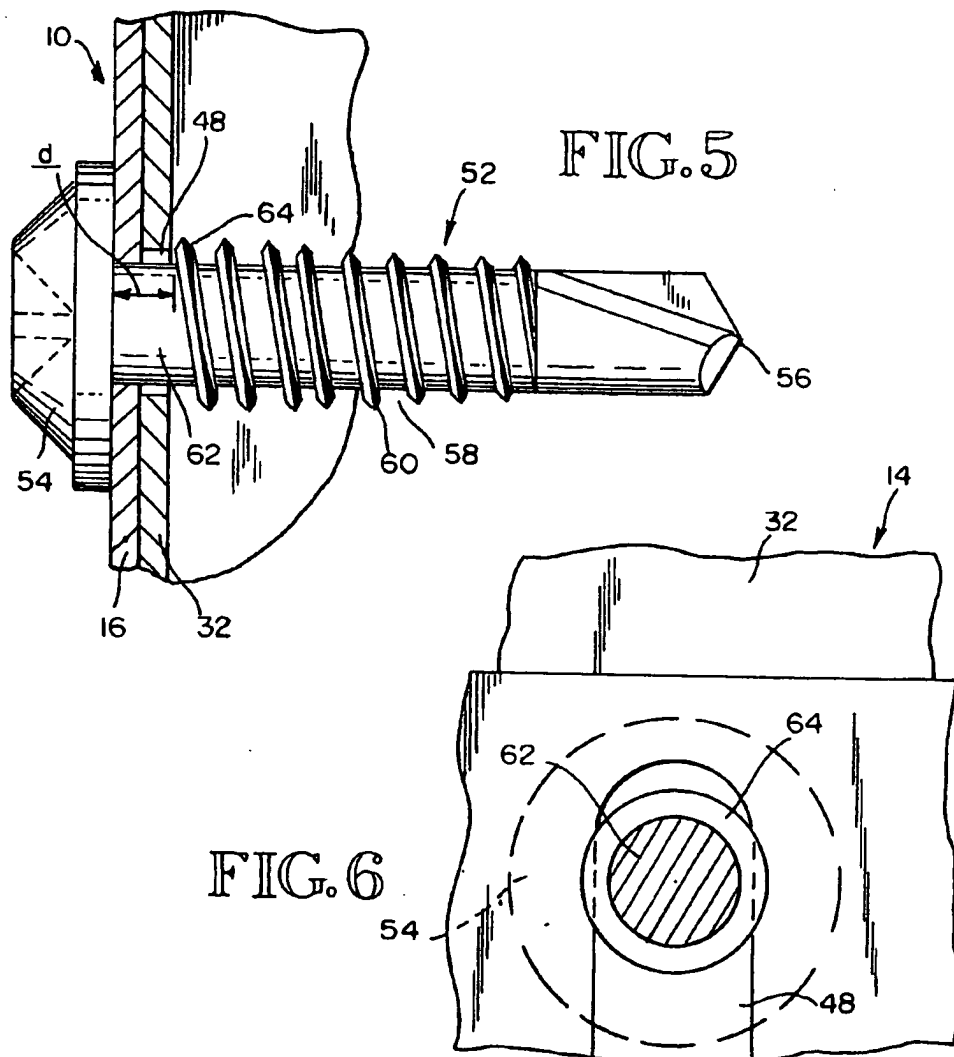


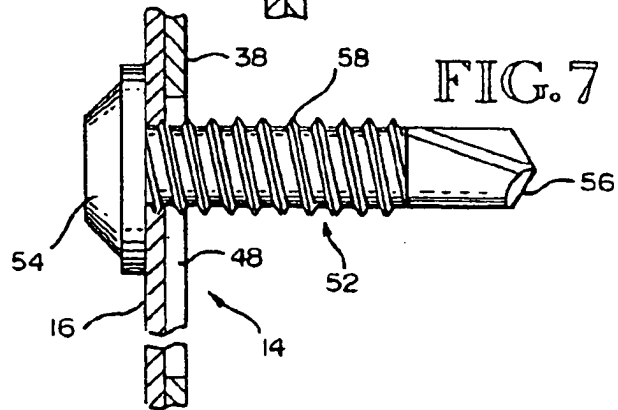
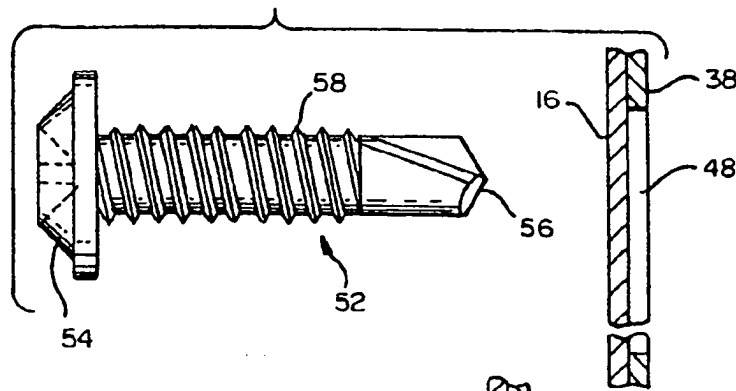
Fig 4 is a vertical sectional view. It shows the head of the screw against the outer surface of the channel wall and it shows the end thread contiguous the inner surface of the stud wall. The American Heritage Dictionary of the English language, Fourth Edition, defines "contiguous" as meaning "sharing an edge or boundary; touching" and "neighboring: adjacent." As shown by figs 4 and 5, the axial distance between the inner surface of the screw head and the outer most surface of the end thread, designated d in Fig 5, is equal to or slightly longer than the combined thicknesses of walls 16, 32. As a result, there is no clamping of the sheet-metal members 16, 32 between the screw head 54 of the end thread 64. As a result, relative movement of the screw shank portion 62 is permitted in the slot 48. See page 8 of the description, lines 4 -8.

Fig 5, reproduced below, is looking vertically downwardly into the slot 48. This view shows that the width of the end thread 64 is wider than the width of the slot 46. This is also shown by Fig 6 reproduced below:



Surowiecki 6,854,237 B2 shows a different type of screw and a different arrangement of the screw and hole in the side wall of the upper channel member. See Figs 5 and 7 of the patent reproduced below:

FIG. 5



The screw 52 has threads that extend outwardly to the inner surface of the screw head 54. When the screw is tightened, the threads engage the wall 16.

Referring to column 6 of the specification, starting at line 64, it is stated:

When the threads on the threaded shank 58 are reached, they will engage the portion of wall 16 immediately surrounding the opening. Then, when the screw fastener 52 is tightened, the threads will engage wall 16 substantially shown in Fig 7. The work man uses his power driver to rotate the screw fastener 52 and continues to rotate it until the head 54 is against wall 16. At that time, the wall 16 will be between the head 54 and threads on the threaded shank 58 that are close to the head 54. This firmly connects the screw fastener 52 to the wall 16. The rest of the threaded shank 58 is either within the slot 38 or inwardly of the wall 38. The threads do not engage any portion of the wall 38. Thus, while the screw fastener 52 is firmly connected to wall 16 it makes no connection with wall 38.

Accordingly, Surowiecki 6,854,237 B2 does not show a screw having a non threaded portion that extends axially between the inner surface of the screw head and the outer surface of the end thread 64. Also, the screw disclosed by the

patent does not have an end thread that is wider than the slot so that it will contact the stud on opposite sides of the slot and the screw will be prevented by such contact from moving axially outwardly through the slot.”

Osterle 6,428,258 B1 relates to providing a better fit of a screw in a work piece. Column 4, lines 10 and 11. In column 4, line 16, and 17, it is stated that “the measures according to the invention can, of course, be used for screws of all lengths,”—. Thereafter, it is stated that “it is also possible to continue the threaded sections 4 over the entire length of the screw shaft, or to provide several threaded sections consecutively, with spaces between them, where the threaded sections can also have different diameters.”

Quite clearly, no where in this patent is there a description of the claimed combination of features which include (1) a channel wall including a screw receiving opening, (2) a stud wall inside of the channel wall which includes a vertical slot (3) a screw having a head with an inner surface contiguous the outer surface of the channel wall, (4) a non threaded shank within the opening in the channel wall and in the slot in the stud wall, (5) an end thread having a diameter larger than the width of the slot of the stud wall, (6) an axial distance between the inner surface of the screw head and the outer surface of the first thread that is substantially equal to the combined thicknesses of the channel and stud walls. All of these features are in claim 9 and are a part of the invention that can not be ignored. In re Royka, 490 Fed 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of the claim against the prior art. In re Wilson, 424 Fed 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)

There is no disclosure in Osterle 6,428,258 B1 of (1) the length of the non threaded portion of the screw relative to the combined thicknesses of a sheet metal channel wall and a sheet metal stud wall, (2) the relationship of the diameter of the non threaded portion of the screw to an opening in a channel wall and a slot in a stud wall, or (3) the relationship of the width of the end thread on the screw and the width of a slot in a stud wall. Quite clearly, the combination claimed by claim 9 is not taught by the combined teachings of the two references.

It is well settled, a proposed modification to a primary reference can not change the principle of operation of the primary reference. In re Ratti, 270 Fed 2d 810, 123 USPQ 349 (CCPA 1959). The invention claimed by Surowiecki 2,854,237 B2 requires a screw having threads that bite into the outside wall of the channel member and threads that are free of contact with the sides of the slot in the stud. The suggested combination would require a substantial reconstruction and redesign of the elements in Surowiecki 6,854,237 B2 as well as a change in the basic principle under which the Surowiecki construction was designed to operate. 270 Fed 2nd 813, 123 USPQ 352.

Claim 5 is patentable over Claims 1-10 of Surowiecki 6,854,237 B2 and Osterle 6,428,258 B1 for the same reasons as claim 9. Claim 5 depends from claim 9 and thus incorporates all the features of claim 9. It further adds a lower channel member and specifies a sheet metal stud include a lower end portion that is within the lower channel space and is connected to the lower channel member. Quite clearly, the combination of claim 5 is neither disclosed by nor

obvious from the reference patents.

Claims 2-4 and 6-8 stand rejected on the ground of non statutory obviousness-type double patenting as being unpatentable over claims 1-10 of Surowiecki 6,854,237 B2 in view of Osterle 6,428,258, as applied against original claim 1, and further in view of Laughlin 5,750,994. Applicant traverse this rejection for the reason set forth above in connection with claim 9. Furthermore, Laughlin 5,740,994 is an improper reference because it comes from a non analogous art. A person skilled in the sheet metal framing art seeking to provide a better connection between an overhead channel member and an upper end portion of a vertical stud that fits within the channel member would never be expected to consult the cable support art for help. Claims 2-4 and 6-8 specify "a plurality of dimples spaced apart lengthwise of the side walls, each dimple representing a location that maybe selected to receive a screw fastener that is used to connect the side wall of the upper channel member to the upper end portion of said stud." In Laughlin 5,740,994, the dimples 44 and 45 "interfere with the body to limit or resist twist of the saddle with respect of the clamp about the axis of the rivet 47." Column 5, lines 55-59. The dimples 44, 45 are not provided to be selectively useable locations for a screw fastener hole.

The non statutory obviousness-type double patenting rejection is improper for another reason. Claims 1-10 of Surowiecki 6,854,237 B2 are not infringed by the subject matter of claims 9 and 2-8 of this application. Also, claims 9 and 2-8 of this application are not infringed by the subject matter of claims 1-10 of Surowiecki 6,854,237 B2. Accordingly, there is no double patenting in fact. The

claims of this application will not in anyway extend the coverage of claims 1-10 of Surowiecki 6,854,237 B2.

Claims 1 and 5 were also rejected as being obvious from Brady 5,127,760; Osterle 6,428,258 and De Francesco et al 5,685,121. Applicant traverses this rejection. Claims 2-4 and 6-8 were further rejected under 35 USC § 103 (a) as being obvious from Brady 5,127,760; Osterle 6,428,258 B1; De Francesco 5,685,121 and Laughlin 5,740,994. Applicant submits that these rejections based on Brady 5,127,760 are not proper with respect to new claim 9 and dependant claims 2-8. Claim 9 specifies an elongated, downwardly opening, sheet metal, upper channel member having spaced apart an elongated sheet-metal stud, including an upper end portion within the upper channel space and including spaced-apart sidewalls that are contiguous to sidewalls of the upper channel member. Claim 9 states that at least one sidewall of the upper channel member includes a screw opening and an adjacent sidewall of the upper end portion of the stud includes and longitudinal slot.

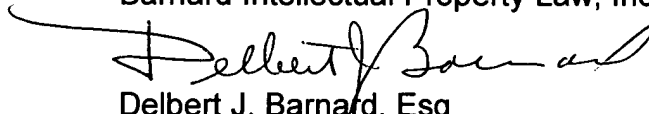
The object of the invention disclosed and claimed by Brady 5,127,760 is to provide an overhead channel member that has a plurality of vertical slots. The upper end portion of a stud is placed in the channel member a screw is inserted through a selected slot and into the stud. De Francesco 5,685,121 does not disclose providing a stud having a slotted upper end portion and inserting it into the overhead channel member in the manner claimed. This patent also does not show the claimed relationship between a particular screw fastener and a hole in the side wall of the channel member and slot in the upper end portion of the stud.

It does not disclose combination of a opening in a wall of an upper channel member and a slot in an adjacent wall of the upper portion of the stud. It does not disclose a screw fastener that receives the combined thicknesses of the side wall of the upper channel member and the side wall of the upper portion of the stud between the inner surface of the head of the screw fastener and an end thread that is inside the stud contiguous the side boundaries of the slot in the stud.

In conclusion, claims 9 and 2-8 are neither disclosed by nor obvious from the prior art. Accordingly, earlier reconsideration and allowance of this application are requested.

Respectfully Submitted,

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